

Traffic Safety Facts

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Increasing Rural Seat Belt Use in Six Great Lakes States

In May 2006, Illinois, Michigan, Minnesota, Wisconsin, Indiana, and Ohio participated in the second year of a National Highway Traffic Safety Administration-sponsored rural demonstration project (RDP) to increase seat belt use in the rural areas of NHTSA's Region 5. These States targeted their rural areas with one week of seat belt enforcement messages followed by one week of intensified seat belt enforcement. Immediately afterward, these States also participated in the National *Click It or Ticket* (CIOT) mobilization, and implemented statewide waves of paid media and seat belt enforcement.

Media

The 2006 rural program was similar to the 2005 RDP, targeting 227 counties in 30 media markets across six States. While Illinois, Michigan, Minnesota, and Wisconsin targeted reasonably large segments of their total population, Indiana and Ohio focused on smaller segments of the population. The States spent about \$1.2 million in paid advertising during the RDP phase, which represents about 15¢ per capita in the targeted rural areas, and \$3.2 million during CIOT, which represents about 9¢ per capita statewide. In 2006, States purchased more advertisements on radio and less on television. The States achieved gross rating points (GRPs) that far exceeded the objective of 300 to 400 GRPs per target market. In 2006, the GRPs increased from 480 during the RDP to 520 during CIOT, which was a slight decline from the GRPs obtained in 2005.

Enforcement

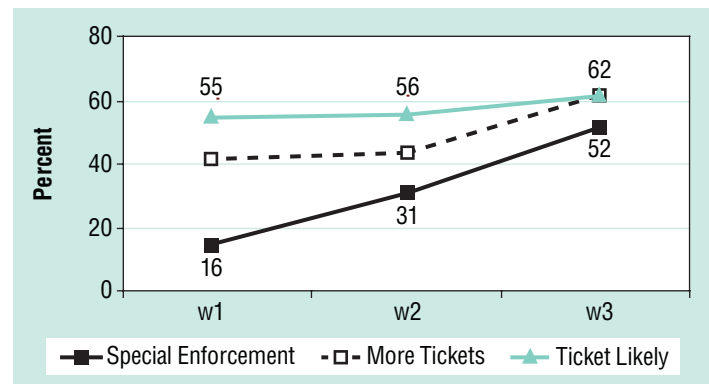
Illinois, Indiana, Minnesota, Ohio, and Wisconsin intensified seat belt enforcement during the 2006 RDP, an increase from the three States (Illinois, Indiana, and Ohio) that intensified enforcement during the first year of the program. All States increased their seat belt enforcement during CIOT. Nearly all States used regular grantees as their core group of participants, with additional agencies recruiting by means of special grants or equipment incentives. Law enforcement liaisons played a major role in the recruitment process. During the RDP and CIOT, police issued approximately 170,000 citations for seat belt violations, averaging 33 citations per 10,000 residents, which was a 30 percent increase from 2005.

Awareness

Evaluation contractors in each State designed and conducted observational and awareness surveys. Telephone surveys and

motorist surveys at driver licensing offices measured changes in the public awareness of seat belt messages and perception of seat belt enforcement. On average, in targeted rural areas, awareness of messages to buckle up increased 8 percentage points during the RDP phase and an additional 8 percentage points during the CIOT phase. Statewide, the awareness of messages to buckle up increased an average of 14 percentage points during the combined RDP and CIOT phases.

Figure 1. Awareness of Special Enforcement Efforts; Averages in Rural Targeted Areas¹



During the rural effort, the greatest changes across States were the perception of more than usual messages (average increase of 32 percentage points in rural areas and 27 points statewide) and the awareness of special enforcement efforts (average increase of 31 points in rural areas and 29 points statewide). Three States (Illinois, Michigan, and Ohio) experienced significant statewide increases in the perceived likelihood of getting a ticket, a great deterrence measure.

Changes in Observed Usage

In 2006, seat belt use increased significantly in the targeted rural areas in every State except Minnesota. Two States (Illinois, Michigan) significantly increased seat belt use during the RDP phase and three States (Illinois, Michigan, and Wisconsin) experienced increases during the CIOT phase.

¹ These percentages are averages of the subset of four States (Illinois, Michigan, Minnesota and Wisconsin) that conducted post-RDP (w2) telephone surveys and that asked these questions.

Table 1. Observed Seat Belt Use During the 2006 RDP and CIOT Mobilizations

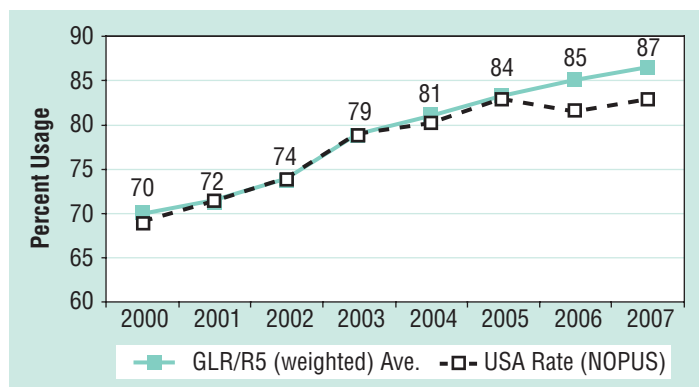
	Rural Usage Rates (%)			State Usage Rates (%)		
	Pre-RDP	Post-RDP	Post-CIOT	Pre-RDP	Post-RDP	Post-CIOT
Illinois	80.9	84.5	86.4	84.6	86.5	90.5
Indiana	72.8	74.9	75.7	79.7	-	83.8
Michigan	81.4	86.1	91.6	-	89.9	94.0
Minnesota	81.1	81.6	81.1	83.2	83.0	84.0
Ohio	75.7	-	79.1	79.6	-	81.7
Wisconsin	70.6	71.5	74.7	68.7	72.8	76.0

All States except Minnesota experienced significant statewide increases in observed seat belt usage. The median gain was 4.1 percentage points in 2006, a smaller gain than the median gain of 4.8 percentage points in 2005. In 2006, the largest increase was 7.3 points in Wisconsin, compared with a maximum gain of 12 points in 2005 in Ohio. Illinois and Wisconsin experienced significant seat belt increases. Michigan measured usage before and after the CIOT and found a significant increase of 4.1 points. Indiana had a 4-point gain and Ohio had a 2-point gain, but because neither State conducted a post-RDP survey, we do not know when these increases occurred. Minnesota's belt rate did not change.

Two-Year Changes in Observed Usage

Over the course of the two-year demonstration program, there was a median 9.2-point increase in observed usage in the *rural targeted areas*. Statewide, the median change was 6.6 percentage points (average of 6.9 points), including slight declines in usage between mobilizations.

Figure 2. Trends in the Great Lakes Region and U.S. Observed Seat Belt Use Rates



Impact on Subgroups in Rural Targeted Areas

Over the two-year program, the largest average gains in rural targeted areas were among males, adults, and occupants of

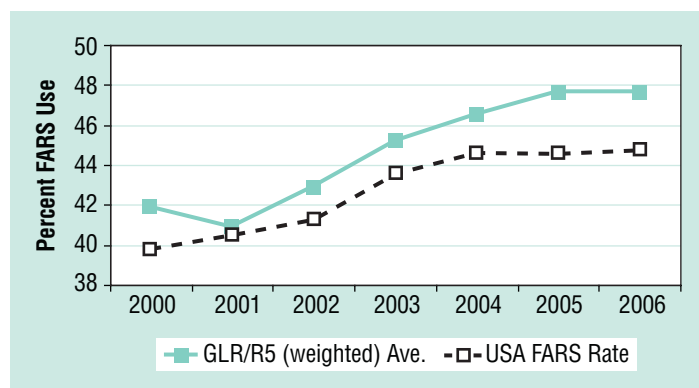
pickup trucks (all with 12-point average gains); followed by youth and seniors (average of +11 points); and by drivers, passengers, and occupants of passenger cars (+10 points). All of these gains include changes between mobilizations.

Regional Versus U.S. Changes in Usage (Observed and Among Crash Victims)

Observed seat belt use in the six Great Lake States and in the nation increased similarly from 2000 through 2003, after which usage in the Great Lakes Region (GLR) continued its upward trend while national usage began to level off. By 2006, there was a 4- to 5-point difference between the GLR rate and the U.S. rate. Thus, it is possible that participation in the RDP facilitated continued increases in observed usage in the GLR during a period when national progress slowed.

Seat belt use among passenger vehicle occupants killed in crashes increased at a slightly greater rate in the GLR than was the case nationally. This greater rate of increase in the GLR appears to have begun in 2002, which is when the first CIOT mobilization was implemented in the Region. Usage in the GLR continued to increase through 2005, while national gains leveled off after 2004. In 2005 and 2006, the Region's rate was 3 to 4 points higher than the U.S. rate, greater than in any of the five previous years.

Figure 3. Trends in the Great Lakes Region and U.S. Seat Belt Use Rates Among Passenger Vehicle Occupants Killed (Source: FARS) 2000–2006



How to Order

To order *Evaluation of a Rural Demonstration Program to Increase Seat Belt Use in The Great Lakes Region* (76 pages plus appendices), prepared by Preusser Research Group, write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394, or download from www.nhtsa.gov. John Siegler, Ph.D., was the Contracting Officer's Technical Representative for this project.



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